

ABSTRACT OF THE INVENTION

Methods for monitoring the accuracy of positional measurements by encoders that translate positional information into signals include determining the difference between two signals generated by the encoder and comparing the difference to a threshold value. Differences greater than the threshold indicate an error in measurement by the encoders. The methods may be practiced using one or more computer programs. The methods may be practiced with any encoder, including absolute and incremental encoders. Encoders include components to implement the methods.